

Fig. 1

Fig. 2

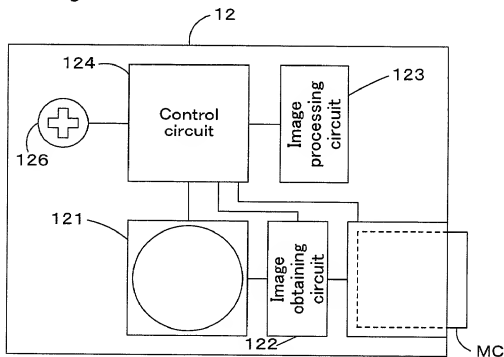


Fig. 3

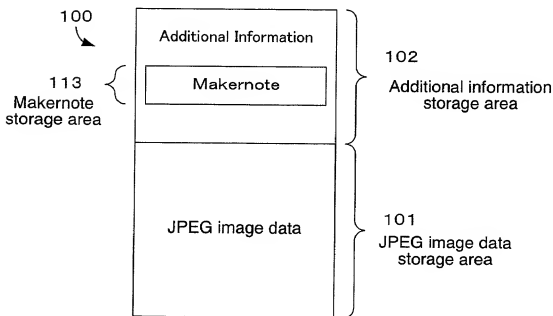


Fig. 4

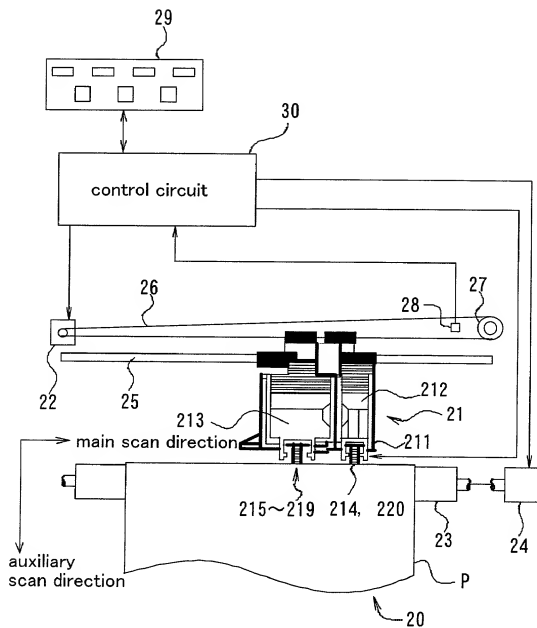


Fig. 6

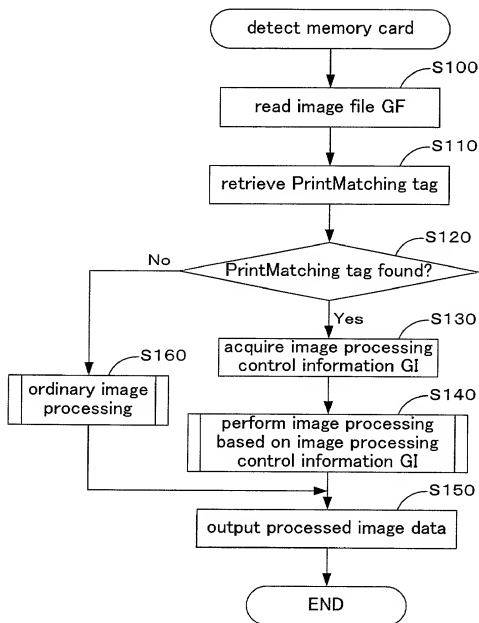
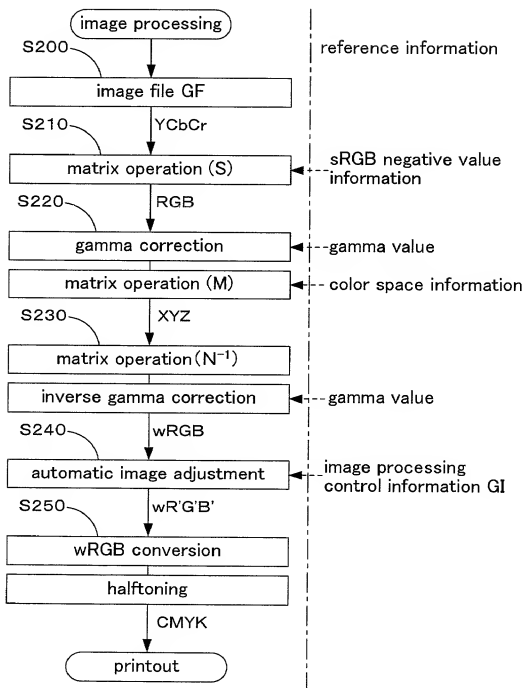
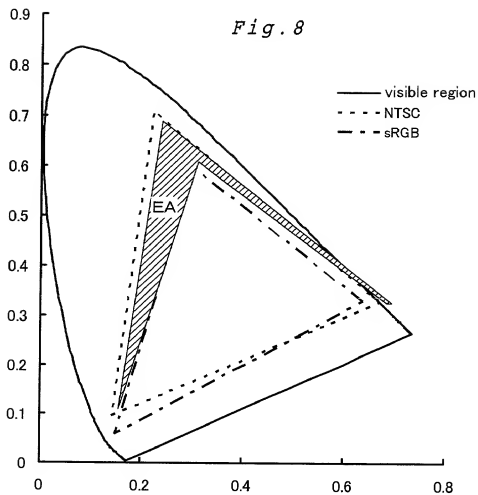


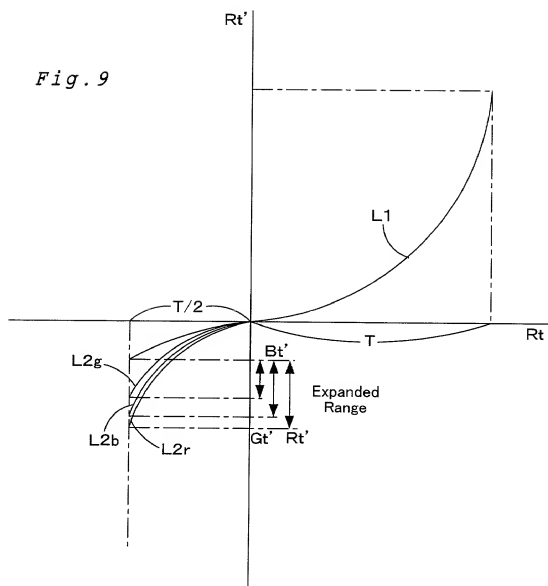
Fig. 7

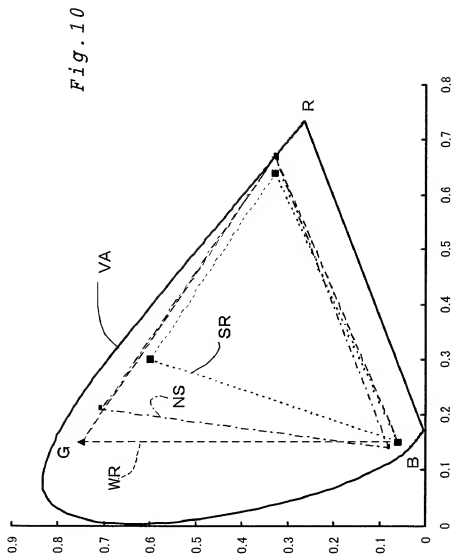




09974926-101201

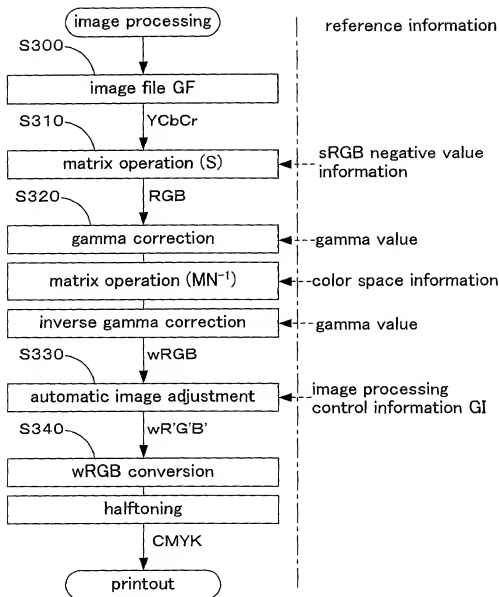
Fig. 9





102101-90642660

Fig. 11



20230714 14:26:01

Fig. 12

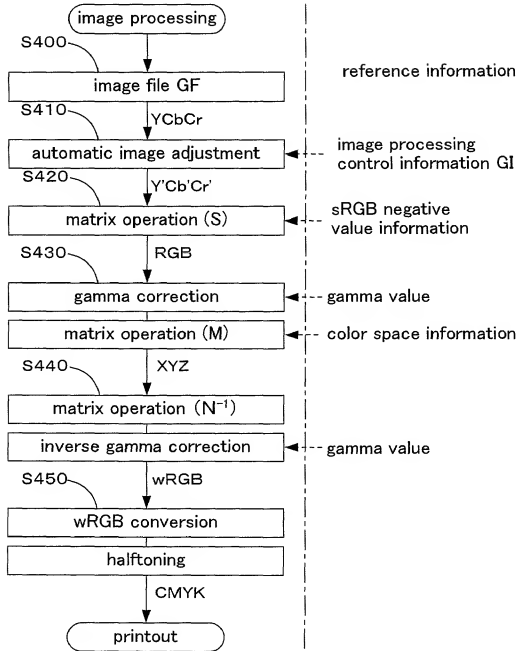


Fig. 13

$$\begin{pmatrix} R \\ G \\ B \end{pmatrix} = \mathbf{S} \begin{pmatrix} Y \\ Cb-128 \\ Cr-128 \end{pmatrix}$$

$$\mathbf{S} = \begin{pmatrix} 1 & 0 & 1.40200 \\ 1 & -0.34414 & -0.71414 \\ 1 & 1.77200 & 0 \end{pmatrix}$$

Fig. 14

$$\begin{pmatrix} X \\ Y \\ Z \end{pmatrix} = \mathbf{M} \begin{pmatrix} Rt' \\ Gt' \\ Bt' \end{pmatrix} \quad \mathbf{M} = \begin{pmatrix} 0.6067 & 0.1736 & 0.2001 \\ 0.2988 & 0.5868 & 0.1144 \\ 0 & 0.0661 & 1.1150 \end{pmatrix}$$

$Rt, Gt, Bt \geq 0$

$$Rt' = \left(\frac{Rt}{255} \right)^{\gamma} \quad Gt' = \left(\frac{Gt}{255} \right)^{\gamma} \quad Bt' = \left(\frac{Bt}{255} \right)^{\gamma}$$

$Rt, Gt, Bt < 0$

$$Rt' = - \left(\frac{-Rt}{255} \right)^{\gamma} \quad Gt' = - \left(\frac{-Gt}{255} \right)^{\gamma} \quad Bt' = - \left(\frac{-Bt}{255} \right)^{\gamma}$$

Fig. 15

$$\begin{pmatrix} R_w \\ G_w \\ B_w \end{pmatrix} = \mathbf{N}^{-1} \begin{pmatrix} X \\ Y \\ Z \end{pmatrix}$$

$$\mathbf{N}^{-1} = \begin{pmatrix} 3.30572 & -1.77561 & 0.73649 \\ -1.04911 & 2.1694 & -1.4797 \\ 0.0658289 & -0.241078 & 1.24898 \end{pmatrix}$$

$$R_w' = \left(\frac{R_w}{255} \right)^{1/\gamma}$$

$$G_w' = \left(\frac{G_w}{255} \right)^{1/\gamma}$$

$$B_w' = \left(\frac{B_w}{255} \right)^{1/\gamma}$$

09974996-101264

Fig. 16

